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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,022	12/11/2003	Charles Parkhurst	TI-37022	7507

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EXAMINER

MOTTOLA, STEVEN J

ART UNIT PAPER NUMBER

2817

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/733,022	<b>Applicant(s)</b> PARKHURST ET AL.	
	<b>Examiner</b> Steven J. Mottola	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13, 16, 17 and 20-22 is/are rejected.
- 7) ☒ Claim(s) 14, 15, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

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The disclosure is objected to because of the following informalities: fig. 1 should be labeled as --prior art--.

Appropriate correction is required.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis for the fifth, sixth, seventh and eighth transistors of this claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-17 & 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Uscategui et al.

Refer to fig. 2 of Uscategui et al. Treating claim 16 first, transistors Q11, Q12 may be read as the claimed pair of npn and pnp transistors. The transistors Q15 and Q16 are part of the bias network for the output stage (see col. 2, lines 59-61) may be read as the current source and sink claimed respectively. They will dynamically bias the npn and pnp transistors Q11, Q12 as claimed since they are controlled by the input stage via current mirrors 26. Regarding claim 17, transistors Q11, Q12, Q14 and Q13 may respectively be read as the first, second, third and fourth transistors claimed, the emitter of Q11 connected to the base of Q14 and the emitter of Q12 connected to the base of

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Q13. Current mirrors 26 may be read as the first and second current sources claimed and they will dynamically bias the first and second transistors (Q11 and Q12) as claimed. The limitation to an output stage of an op amp appearing in the preamble of claims 16-17 and in claim 20 is regarded as an intended use of the claimed circuitry. Regarding claim 21, all transistors in Uscategui et al. are bipolar.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Griffith et al.

Griffith et al. disclose an op amp in fig. 1 including an input stage 12 that includes a differential input pair 30,32 (see detail fig. 2) may be read on the input stage claimed and a cascade transistors 200,202 that may be read on the common base stage claimed. They are connected to an output stage 18,24 that is dynamically biased by stages 14,22 which receive signals from the cascade (common base) stage (via source follower 13). Note detail fig. 5 showing stage 14 in detail; line 107 controls the bias of this stage but also connects the input and output stages as can be seen in fig. 1.

Although Griffith et al. do not identify their output stage 18,24 as a pre-driver, since no actual driver is claimed the difference is a matter of semantics since in both cases a push pull output stage is dynamically biased by the output of a common base stage.

Claims 14,15,18 & 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-12 allowed.

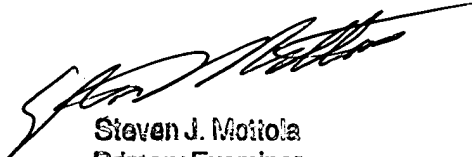
The specific transistor interconnections of these claims are not shown in the prior art of record in the context claimed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Mottola whose telephone number is 571-272-1766. The examiner can normally be reached on M-Th from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal, can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven J. Mottola  
Primary Examiner